

ABSTRACT

Devices, circuits, and methods generate a substantially constant output voltage. A
5 power storage element generates a DC output voltage from an input voltage. The output
is sampled to generate a feedback signal. An error amplifier generates an error signal
from the feedback signal and a reference voltage. A ramp generator generates a ramp
signal from the error signal. A comparator generates a pulse signal by comparing the
ramp signal to a threshold voltage. The pulse signal is used to control a power switch,
10 which switches the power storage element on and off. The pulse signal is generated such
that, if the input voltage changes within a certain range, a width of its pulses changes so
as to maintain the output voltage substantially constant.